

**West Mojave Plan
Task Group 1
Green Tree Inn, Victorville
August 13, 2001**

Attendees

Task Group: Ileene Anderson, Margie Balfour, Jim Barber, Pam Barber, Ray Bransfield, Marie Brashear, Paul Condon, Michael Connor, Clarence Everly, Jeri Ferguson, Martin Gill, Art Gleason, Mark Hagan, Jeanette Hayhurst, Gerry Hillier, Harold Johnson, Manuel Joia, Becky Jones, Peter Kiriakos, Paul Kober, Carol Landry, John Lightburn, Laurie Lile, Tonya Moore, James McRea, Lorelei Oviatt, Doug Parham, Mickey Quillman, Pat Quist, Randy Scott, Courtney Smith, Barbara Veale, M. Watton, Marcia Wertenberger, Robert Williams, Terry Wold.

West Mojave Team: Bill Haigh, Ed LaRue, Valery Pilmer, Bill Boarman (USGS)

Introductions

Bill Haigh opened the meeting at 10:05 A.M. and introductions were made.

The minutes from the July 17, 2001 meeting were approved by the group.

Bill Haigh indicated that the meeting will cover a report from the Compensation Subcommittee, ravens, and education. He also noted that a 1st cut draft of the plan glossary has been distributed, and asked Task Group members to review it and provide input to him.

Compensation Subcommittee

Laurie Lile gave the report on the last Compensation Subcommittee meeting. She indicated that the subcommittee worked on criteria for delineating boundaries for the fee areas. The subcommittee is still flushing out the criteria and will report back in more detail at the next Task Group 1 meeting.

Ravens

Bill Haigh referenced the handout “Proposed Program to Reduce Predation on Desert Tortoises by Common Ravens in the Mojave and Colorado Deserts”, dated August 9, 2001. He introduced Dr. William (Bill) Boarman, the United States Geological Survey research biologist and West Mojave team member who authored the report. Haigh indicated that the measures on ravens laid out in the September 1999 “Draft Evaluation Report” were also developed by Bill Boarman, and represent the early thinking on this issue. Haigh recommended that the group focus on the new report. The action items begin on the bottom of page 9 of the report.

Boarman indicated that the report is a draft report and is currently being peer reviewed. He indicated that the measures are divided into four categories:

- Habitat
- Lethal actions
- Big information gaps - research
- Management related recommendations

Peter Kiriakos suggested that consideration be given to the raven's impact on other species as well. Boarman responded that while there is some evidence of predation on one or two other species of concern, there is no evidence that ravens are impacting those populations. Research is lacking in this area. He also pointed out that perch sites for ravens could also negatively impact raptors.

The group then went through the various action items contained in Dr. Boarman's report.

Action H1 (at bottom of page 9): The following points were made during the discussion of this item:

- Raven population is increasing dramatically.
- Landfills provide a food source, particularly during the summer months when food is scarce in the desert. This allows them to survive into the spring months to breed (subsidized predation).
- The percentage of tortoises using the landfills, while unknown, is thought to be considerable.
- Juvenile tortoises are active at the same time that ravens have chicks in the nest (April through May).
- The most important objective for this action item involves providing adequate cover (6 inches or more) of trash at the landfills. Effective cover is needed throughout the day.
- Coyote proof fencing is needed. Coyotes enter the landfill and dig up trash at night. Ravens come in the mornings and feed on the trash uncovered by the coyotes.
- Don't leave standing water at the landfills. The closer water is to the landfill, the better it is for the ravens.
- If trash trucks are cleaned on site, it leaves piles of garbage. Sometime this is cleaned up, sometimes not.
- San Bernardino County landfills are being well maintained. Kern County landfills are not covering trash as quickly. Lorelei Oviatt indicated she would be willing to facilitate discussion with Kern County Waste Management Department regarding the three Kern County desert landfills (Ridgecrest, Boron, Mojave). Boarman indicated that Boron Landfill is deficient, and would be a good place for a transfer station.
- Well maintained transfer stations work better for small communities than keeping smaller, more remote landfills open.
- Some expressed concern that it is not clear who to call about illegal dumping and that county response to such calls is slow.
- Randy Scott asked that consideration be given to how much each of these measures helps

- (cost/benefit issue).
- Five miles was suggested as the minimum distance which should separate a new landfill from a DWMA. While not supported by hard data, the five mile radius is intuitively reasonable.

The action item was accepted by the group, as follows:

Reduce the density of ravens and number of birds that may take tortoises by reducing the availability to ravens of solid wastes at sanitary landfills. Reduce availability of anthropogenic sources of food to ravens by modifying landfill operation practices in the deserts: (i) ensure effective cover of waste (6 inches cover multiple times daily, cover with tarps temporarily), (ii) erect coyote-proof fencing, (iii) render raven-proof all sources of standing water at the landfill, and (iv) keep truck cleaning areas and temporary storage facilities clean and free from organic wastes and standing water.

Action H2 (page 11): Bill Boarman indicated that this item handles the issue of solid waste pick-up at all points of the waste stream. The following comments and points were made:

- Farms and livestock operations provide food for ravens that support increasing raven populations. Dairies, in particular, contribute. Ravens feed on afterbirths, carcasses and grain from where cows are feeding.
- Most agricultural activities (i.e. crop production) are not subject to land use permits. Dairies and some other livestock operations typically require a CUP. Ray Bransfield noted that if there is no land use permit, USFWS can regulate only where tortoises or other endangered species are present.
- Unregulated uses need to be included in the educational component.
- Agricultural interests need to become more active in raven management.
- Anecdotes regarding people purposefully feeding ravens were offered. It was agreed that better education needs to occur to discourage this.

This section was approved with the following changes: (i) Delete the word “require”; (ii) move a portion of this section to the “Research” measures; (iii) replace “enlist” with “encourage”; and (iv) add to last sentence “including but not limited to businesses and agriculture.” Cross reference this section to appropriate sections in the status of management prescriptions document. Final approved wording follows:

Reduce the availability to ravens of organic wastes outside of landfills. Take the following steps: (i) Encourage the use self-closing trash bins at transfer stations and roadside rest stops, and behind restaurants, gas stations, and grocery stores; encourage or require use of raven-proof garbage drums at houses and other facilities; and prevent use of plastic bags for street-side pick up in residential areas; (ii) Encourage livestock operators to reduce

availability of cattle feed, carcasses, afterbirths, and insects at feedlots and dairy farms; and (iii) Use public education (see table 3) and other means to reduce the number of citizens who purposely feed ravens or who inadvertently do so by leaving pet food out where ravens can easily access it including. These educational efforts should include, but not be limited to, business and agriculture.

Action H3 (page 11). Boarman indicated that ravens scavenge road kills. In areas along Highway 58 where barrier fencing has been erected, road kills have been reduced by 90%. While not the most important action, it is not the least important either. He indicated that both sides of the road need to be fenced to reduce road kill. The smaller gauge of mesh is referenced to prevent smaller animals from crossing the highways.

The group discussed the need for education on how and where to dispose of carcasses (i.e. don't throw off to side of road).

Lorelei Oviatt expressed concern that the words "along major roads and highways" is overly inclusive. She noted that the fencing committee specified roads to be fenced.

The action item was approved as worded below:

Reduce the availability of carcasses of road-killed animals along highways in tortoise habitat. As some ravens derive most of their food from road kills, erect barrier fences (1/2 to 1/4 inch mesh hardware cloth; Boarman and Sazaki 1996) along roads and highways specified in the fencing table to prevent animals from getting killed on roads. Recommendations may be modified as more information and evaluation becomes available.

Action H4 (bottom of page 12): Bill Boarman stated that this is an important item. Some water sources can be covered. He recommended that item (ii) be moved to the research section.

Considerable discussion took place regarding the need to maintain water sources that other species may depend on. Some favored focusing on water sources near landfills, and putting the emphasis on objectives that take care of ravens, without precluding water for other species. The covering of stock tanks was seen as problematic by some. It was noted that the closer the water is to the food source the more important it is.

The action was revised and approved to read as follows:

Reduce the population density of ravens and number of birds that may take tortoises by reducing the availability of water to ravens while being mindful of the needs of other species.

The objectives will be moved to the section on research.

The group broke for lunch at 12:15 and reconvened at 1:25 P.M.

Action H5 (page 13): Boarman indicated that the reason for this action is that ravens come back to the same territory to nest. He recommended deleting the word “active”.

The group approved the action with the recommended revision, as follows:

Reduce the impact ravens have on tortoise populations at specific locations by removing active raven nests. Remove raven nests (i) in specific areas where raven predation is high and tortoise populations are targeted for special management, and (ii) do so during the egg-laying phase of the raven’s breeding cycle. Any nestlings found should be euthanized using standard humane measures.

Action H6 (page 14): Bill Boarman indicated that ravens forage within 1/4 to 1/2 mile around nests. Tortoise population is most affected by ravens in the areas around raven nests. This action advocates eliminating artificial perches in areas where natural nesting sites (i.e. Joshua trees) don’t exist.

In response to a question about removing nests from power lines, Ray Bransfield will check to see whether a “blanket” salvage permit would be appropriate. Mark Hagan noted that Edwards Air Force Base maintains a depredation permit for migrating birds. If they can get nests down while inactive, they don’t need an additional permit.

It was noted that this action should apply in or near DWMAAs.

The action item was approved with revision to reflect that it will apply within and adjacent to tortoise DWMAAs:

Avoid constructing new nesting structures and reduce the number of existing nesting structures in areas where natural or anthropogenic substrates are lacking. Reduce availability of nesting sites by observing the following. (i) Within and adjacent to Tortoise DWMAAs, prevent the construction of new structures (e.g., power towers, telephones, billboards, cell phone towers, open warehouses or shade towers, etc.) where alternative natural nesting substrates (e.g., Joshua trees, cliffs) do not already exist within approximately 2 miles. (ii) If they must be built, design such structures in such a way as to prevent ravens from building nests on them. (ii) Remove unnecessary towers, abandoned buildings, vehicles, etc., within tortoise management areas that may serve as nesting substrates unless natural

structures are in abundance.

Action L1 (page 15): Remove birds that are known to prey on tortoises.

Bill Boarman noted that this measure -- the removal of birds known to prey on tortoises -- is the most controversial of all the action items, as some organizations and individuals are opposed to killing ravens. He also noted that the item as written was acceptable to the Humane Society when last addressed.

Dr. Boarman stated that not all ravens are tortoise killers. The best way to identify ravens that feed on tortoises is to look for tortoise shells under nests. If three or more shells are found beneath a nest, the Humane Society will agree to killing the ravens.

It was noted that the word “bird” should be replaced with “raven” for clarity. Also Ed LaRue suggested adding language that any poisoned raven carcasses be removed.

The action item was approved with revisions, as follows:

Remove ravens that are known to prey on tortoises. Selectively shoot individual ravens in areas of high tortoise predation. Ravens will be shot by rifle or shotgun if they show a likelihood of preying on tortoises (e.g., tortoise shells showing evidence consistent with raven predation found beneath or within approximately 1 mile a nest or perch). Ravens will be trapped and humanely euthanized where shooting is not possible (e.g., on powerlines or in residential areas) or unsuccessful. Young ravens found in nests of removed adults will be euthanized humanely if they can be captured safely. Poisoning with DRC-1339 or other appropriate agent may be used against targeted ravens in these limited areas if it is shown by results of the research proposals discussed below to be safe for other animals. Poisoned carcasses will be removed if they can be located.

Action L2 (page 16): Bill Boarman stated that this raven removal item is a bit more aggressive and is intended for high tortoise mortality areas within the Tortoise DWMA. Removal of ravens by shooting is considered an emergency measure.

The language for this item was approved with appropriate cross references (including head starting):

Facilitate recovery of critically threatened tortoise populations by removing ravens from specific areas where tortoise mortality from several sources is high, raven predation is known to occur, and the tortoise population has a chance of benefitting from raven removal. Remove all ravens foraging within specific areas (e.g., Desert Tortoise Research Natural Area, pilot headstarting

sites, etc.) of historically high tortoise mortality and raven predation, particularly where demographic analyses indicate that juvenile survivorship has been unusually low. Ravens will be shot by rifle or shotgun if they are found foraging, hunting, roosting, or nesting within 0.5 miles of the specific targeted area. Where shooting is not possible (e.g., on powerlines or in recreation and residential areas), ravens will be poisoned (if shown by the research programs recommended below to be safe) or trapped and humanely euthanized. Young ravens found in nests of removed adults will be euthanized humanely if they can be captured safely.

Research Actions (pages 17-26):

The group agreed to list the research items in the summary table.

When asked about his opinion of head starting, Bill Boarman indicated that he is not a strong proponent of it.

Action A1 (page 27): Some discussion occurred regarding the need for information sharing between bioregional plans. The language was approved subject to adding the a revision which reflected this concern, as follows:

Establish two work groups to oversee management direction, review information, coordinate with other agencies/groups, solicit funding for implementation of specific management measures, and distribute information/data. The work groups shall meet annually or as needed to discuss raven management actions. One work group would be an Interagency Task Force to coordinate implementation of the program. The other would be a technical and policy oversight team to evaluate the progress of the plan, interpretation of data, and recommend changes in the overall program based on scientific data. There shall be data sharing between adjacent bio-regional plans and resource management plans. The goals of the work groups would be to (i) increase efficiency, effectiveness, and scientific validity of raven management in the California deserts, and (ii) ensure that future phases are developed and implemented in accordance with results of research and monitoring outlined above.

Action A2 (page 28): The action item was approved, as follows.

Monitor both raven status and effectiveness of management actions at reducing predation rates on juvenile tortoises while maintaining viable raven populations in the California deserts. Adjust management measures and

develop successive phases as determined by additional data, documentation, monitoring, environmental assessments, and public review with valid concerns.

Adjustments to Management Prescription Table

- **S1a (page 31):** Discussion occurred as to whether the five mile radius should be raised to 10 or 40 miles. Bill Boarman indicated he feels comfortable with 5 to 10 miles, but cannot justify 40. The county representatives indicated they were comfortable with five miles. The language was approved as shown in the June 27, 2001 chart.
- **S2a (page 31):** Will be replaced by H1 language.
- **S3a (page 32):** Will be replaced by H2 language.
- **S4a (page 32):** Move the following language to H2 (S3a): “Illegal dumps on private and public lands in the DWMAs should be cleaned up.” S4a was approved to read as follows: “Ensure that landfill operations encourage legal dumping.” This sentence will be followed by a listing of ideas as generally implied by the series of questions listed in the September 1999 biological evaluation.
- **R1 (page 51): Bill, my notes are very unclear for this section. I noted some discussion regarding the need to better define predation (include coyotes?); concern from Paul Condon re sewage ponds (include in research); and the need for possible legislation to allow the hunting of ravens (Mark Hagen noted can kill crows in California but not ravens. Becky responded that it would have to be put into F&G regs. My notes also indicate R3a becomes R7 and H5, and R4a becomes H2 and T1E. Sorry, I’m not really certain what happened here!**

Meeting Dates

The September 10, 2001 Task Group 1 meeting was rescheduled to Monday, September 17, 2001 at 9:30 A.M. at the Green Tree Inn, Victorville. Primary topic for discussion will be education.

An additional meeting date was scheduled for Monday, October 15, 2001 at 9:30 A.M. at the Green Tree Inn, Victorville.

The next Task Group 2 meeting is scheduled for Thursday, August 30, 2001 from 6:00 to 9:00 P.M., at the Green Tree Inn, Victorville.

A Steering Committee meeting is also scheduled for Thursday, August 30, 2001 starting at 2:00 P.M., at the Green Tree Inn.